

including an operation control menu; a second display module configured to be able to receive a touch input and connected to the first display module; a sensing unit configured to determine whether the first display module is bent or folded; and a controller configured to display the operation control menu on the second display module by scrolling the operation control menu if data provided by the sensing unit indicates that the first display module is bent or folded, the controller controlling an operation corresponding to the chosen menu item to be performed if one of a plurality of menu items of the operation control menu is chosen by being touched.

BRIEF DESCRIPTION OF THE DRAWINGS

The above and other features and advantages of the present invention will become more apparent by describing in detail preferred embodiments thereof with reference to the attached drawings in which:

FIG. 1 illustrates a block diagram of a mobile terminal according to an exemplary embodiment of the present invention;

FIGS. 2 and 3 illustrate front perspective views of the mobile terminal shown in FIG. 1;

FIG. 4 illustrates a rear perspective view of the mobile terminal shown in FIG. 2;

FIG. 5 illustrates a flowchart of a method of controlling a mobile terminal according to a first exemplary embodiment of the present invention;

FIG. 6 illustrates a flowchart of a method of controlling a mobile terminal according to a second exemplary embodiment of the present invention;

FIG. 7 illustrates a flowchart of a method of controlling a mobile terminal according to a third exemplary embodiment of the present invention;

FIG. 8 illustrates a flowchart of a method of controlling a mobile terminal according to a fourth exemplary embodiment of the present invention;

FIG. 9 illustrates a diagram for explaining a separate-operating mode;

FIGS. 10 and 11 illustrate diagrams showing how to execute an operation control menu;

FIG. 12 illustrates diagrams showing how to display an operation control menu;

FIG. 13 illustrates diagrams showing how to switch from one operating-mode screen to another operating-mode screen;

FIG. 14 illustrates a diagram for explaining an integrated-operating mode;

FIGS. 15 and 16 illustrate diagrams showing how to move and choose an operation control menu; and

FIG. 17 illustrates diagrams showing how to switch between an integrated-operating mode and a separate-operating mode.

DETAILED DESCRIPTION OF THE INVENTION

The present invention will hereinafter be described in detail with reference to the accompanying drawings in which exemplary embodiments of the invention are shown.

The term 'mobile terminal', as used herein, may indicate a mobile phone, a smart phone, a laptop computer, a digital broadcast receiver, a personal digital assistant (PDA), a portable multimedia player (PMP), or a navigation device. In this disclosure, the terms 'module' and 'unit' are used interchangeably.

FIG. 1 illustrates a block diagram of a mobile terminal 100 according to an embodiment of the present invention. Refer-

ring to FIG. 1, the mobile terminal 100 may include a wireless communication unit 110, an audio/video (A/V) input unit 120, a user input unit 130, a sensing unit 140, an output unit 150, a memory 160, an interface unit 170, a controller 180, and a power supply unit 190. Two or more of the wireless communication unit 110, the A/V input unit 120, the user input unit 130, the sensing unit 140, the output unit 150, the memory 160, the interface unit 170, the controller 180, and the power supply unit 190 may be incorporated into a single unit, or some of the wireless communication unit 110, the A/V input unit 120, the user input unit 130, the sensing unit 140, the output unit 150, the memory 160, the interface unit 170, the controller 180, and the power supply unit 190 may be divided into two or more smaller units.

The wireless communication unit 110 may include a broadcast reception module 111, a mobile communication module 113, a wireless internet module 115, a short-range communication module 117, and a global positioning system (GPS) module 119.

The broadcast reception module 111 may receive a broadcast signal and/or broadcast-related information from an external broadcast management server through a broadcast channel. The broadcast channel may be a satellite channel or a terrestrial channel. The broadcast management server may be a server which generates broadcast signals and/or broadcast-related information and transmits the generated broadcast signals and/or the generated broadcast-related information or may be a server which receives and then transmits previously-generated broadcast signals and/or previously-generated broadcast-related information.

The broadcast-related information may include broadcast channel information, broadcast program information and/or broadcast service provider information. The broadcast signal may be a TV broadcast signal, a radio broadcast signal, a data broadcast signal, the combination of a data broadcast signal and a TV broadcast signal or the combination of a data broadcast signal and a radio broadcast signal. The broadcast-related information may be provided to the mobile terminal 100 through a mobile communication network. In this case, the broadcast-related information may be received by the mobile communication module 113, rather than by the broadcast reception module 111. The broadcast-related information may come in various forms. For example, the broadcast-related information may be electronic program guide (EPG) of digital multimedia broadcasting (DMB) or may be electronic service guide (ESG) of digital video broadcast-handheld (DVB-H).

The broadcast reception module 111 may receive the broadcast signal using various broadcasting systems such as digital multimedia broadcasting-terrestrial (DMB-T), digital multimedia broadcasting-satellite (DMB-S), media forward link only (MediaFLO), DVB-H, and integrated services digital broadcast-terrestrial (ISDB-T). In addition, the broadcast reception module 111 may be configured to be suitable for nearly all types of broadcasting systems other than those set forth herein. The broadcast signal and/or the broadcast-related information received by the broadcast reception module 111 may be stored in the memory 160.

The mobile communication module 113 may transmit wireless signals to or receives wireless signals from at least one of a base station, an external terminal, and a server through a mobile communication network. The wireless signals may include various types of data according to whether the mobile terminal 100 transmits/receives voice call signals, video call signals, or text/multimedia messages.

The wireless internet module 115 may be a module for wirelessly accessing the internet. The wireless internet mod-